

**BEFORE THE PUBLIC UTILITIES COMMISSION OF  
THE STATE OF CALIFORNIA**



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Order Instituting Rulemaking to Develop a  
Successor to Existing Net Energy Metering  
Tariffs Pursuant to Public Utilities Code  
Section 2827.1, and to Address Other Issues  
Related to Net Energy Metering.

Rulemaking 14-07-002  
(Filed July 10, 2014)

**COMMENTS OF VOTE SOLAR  
ON AB 693 IMPLEMENTATION**

VOTE SOLAR  
Susannah Churchill  
360 22<sup>nd</sup> Street, Suite 730  
Oakland, CA 94612  
Telephone: (415) 817-5065  
Email: [susannah@votesolar.org](mailto:susannah@votesolar.org)

***Regional Director, West Coast  
for Vote Solar***

August 3, 2016

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**I. INTRODUCTION**

Pursuant to the *Administrative Law Judge's Ruling Seeking Proposals And Comments On Implementation Of Assembly Bill 693*, Vote Solar appreciates the opportunity to submit the following comments. AB 693, authored by Assemblymember Eggman and signed into law by Governor Brown on October 8, 2015, requires the California Public Utilities Commission (Commission) to establish a new program called the Multifamily Affordable Housing Solar Roofs Program (abbreviated herein as MAHSRP) with a goal of installing 300 MW of rooftop solar on multifamily affordable housing units through 2030. Vote Solar applauds the leadership of Assemblymember Eggman in authoring AB 693; expanding access to clean distributed energy to millions of low-income and disadvantaged Californians is an essential element of building a just and equitable clean energy future for the state.

In these comments, Vote Solar responds selectively to the questions in the Ruling, as many other parties have valuable experience in serving affordable housing residents and in the details of the multi-year development and implementation of the state's Multifamily Affordable Solar Housing (MASH) program, as well as in developing robust local hiring requirements. We focus our specific comments on the use of CalEnviroScreen, the eligibility of solar-paired storage under the program, and which tariffs should be available or required for program participants. In addition, we offer the following overarching comments:

- We consider the primary purposes of the program to be maximizing the number of megawatt-hours of renewable energy serving residents of multi-family affordable housing, maximizing the collective bill savings of multi-family affordable housing residents, and providing strong job training/local hiring opportunities. To achieve these goals, the program must strike a balance whereby many affordable housing owners see adequate financial incentive to participate via some savings to common load, while also ensuring that the renewable generation resulting from the program “be primarily used to offset electricity usage by low-income tenants.”<sup>1</sup> Also important will be creating an incentive structure that incents developers to build projects at competitive prices and to drive costs down over time, and ensuring that MAHSRP incentives are used efficiently and take into account tax credits and any other incentives that the project owner is also claiming.
- Where practical, we see benefit in modeling the MAHSRP program as much as possible after MASH, since MASH has enjoyed program success and since many stakeholder and Commission resources have already been dedicated to developing and refining the MASH model.

Getting the design right for implementation of AB 693 is important, and at the same time approving additional programs and policies for disadvantaged communities (DACs) as required by AB 327 will be necessary in this proceeding. Multifamily affordable housing facilities of 5 units or larger house only a small percentage of low-income and otherwise disadvantaged Californians throughout the state. To make good on the valuable opportunity to meaningfully and fairly increase access to renewable energy afforded by AB 327, the Commission must develop a suite of programs that will increase renewable energy access for disadvantaged renters outside of designated affordable housing, as well as disadvantaged single family homeowners.

## II. RESPONSES TO SPECIFIC QUESTIONS

**Question 2.** *Should the Program use the CalEnviroScreen tool developed by the California Environmental Protection Agency to determine the boundaries of “a disadvantaged community,*

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<sup>1</sup> Section 2870(f)(2).

*as defined by the California Environmental Protection Agency pursuant to Section 39711 of the Health and Safety Code”? Why or why not? If you recommend using another method, please provide sources for the method, a detailed justification for its use, and examples of its potential application to the Program.*

**Response:** Yes, the MAHSRP program should use the most recent CalEnviroScreen (CES) tool developed by the California Environmental Protection Agency to determine the boundaries of “a disadvantaged community, as defined by the California Environmental Protection Agency pursuant to Section 39711 of the Health and Safety Code” because CES is the tool that CalEPA has developed to implement Section 39711. AB 693 is in this way specific regarding what tool should be used to define the disadvantaged communities (DACs) that form one half of the eligibility definition for customers to participate in MAHSRP, whereas AB 327 does not specify the CalEPA process that has resulted in CES be used to define DACs in the context of that bill.

However, AB 693 does not specify *in what manner* CES should be used to identify DACs. Vote Solar and a number of other parties raised concerns in Phase 1 of this proceeding that a top 25% statewide designation via CalEnviroScreen leaves out many low-income, challenged rural and coastal communities, and that many communities included in a 25% statewide designation will not be eligible under this program because they are in LADWP territory.<sup>2</sup> In addition, data provided in the IOUs’ November 2, 2015 filings in this proceeding shows that there are very large differences across IOUs regarding how many residential customers qualify under a 25% statewide designation. Only 2.5% of residential customers in SDG&E territory live in a census tract that qualifies under a 25% statewide designation, while 14% of residential customers would qualify in PG&E territory and 60% of residential customers would qualify in SCE territory.<sup>3</sup> This points to the value of using CES to assess DACs *by region*, in order to ensure that each IOU has a meaningful proportion of customers in DACs. (We know that using the CES tool to rank

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<sup>2</sup> See for example “Proposal Of The Solar Energy Industries Association And Vote Solar For A Net Energy Metering Successor Standard Tariff,” filed by Vote Solar and the Solar Energy Industries Association on Aug 3, 2015, pp. 44-46.

<sup>3</sup> See Appendix A of these November 2, 2015 filings: “San Diego Gas & Electric Company (U 902 E) Comments On Administrative Law Judge Ruling Regarding Assembly Bill 693,” “Pacific Gas And Electric Company (U 39 E) Reply Comments On Party Proposals And Staff Papers” and “Southern California Edison Company's (U 338-E) Comments On Assembly Bill 693,” as well as the analysis calculating percentages by utility from that data included in GRID Alternatives’ comments filed today.

census tracts by region is possible, because the IOUs included an assessment of the top 20% by utility territory in the same Nov 2 filings.)

The Commission has recently approved a more flexible approach to the use of CES in the approval of SCE's and SDG&E's electric vehicle pilot programs in A.14-10-014 and A.14-04-014, respectively, that we believe should be applied in this proceeding as well.<sup>4</sup> Both the EV pilot program decisions note that the Commission "find[s] it reasonable to be more inclusive" and "find[s] it reasonable to define the eligible disadvantaged communities as the top quartile of census tracts per the CalEnviroScreen scores *on either a state-wide or a utility-wide basis – whichever is broader*" (emphasis added).<sup>5</sup> In other words, each utility is required to analyze and demonstrate whether a statewide or utility-wide assessment of the top 25% CES census tracts would include more customers, and whichever is broader, they must use the broader set of maps to designate DACs for the purposes of this program. In this way, SCE could continue to map a broad swath of eligible census tracts using a statewide designation, given the significant air quality problems in the Los Angeles area, while SDG&E and PG&E would both presumably use a utility-wide assessment that would include a broader number of census tracts than a statewide designation allows.

Another important issue related to CES is ensuring that already-built MAHSRP projects are not at risk of becoming ineligible for the program if future iterations of the CES tool designate different census tracts. Instead, projects should be eligible as located in CES-designated DAC areas based on the date that they were built. CES is a tool that will continue to evolve and measures changing demographic and pollution-related information in communities, and therefore the Commission should clarify that projects deemed eligible under CES at one time will not be at risk of later becoming ineligible due to changes in CES designations. Such a determination would be consistent with the Commission's May 2016 decision on the Green Tariff Shared Renewables program, which held "...we agree that it is important that the rules not change midstream. Should a project be deemed to count... based upon the approved rules at the time of

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<sup>4</sup> While a decision on PG&E's EV program has not yet been proposed by the Commission, we see no reason why the same rule for defining DACs would not be applied to PG&E as to the other two IOUs.

<sup>5</sup> D.16-01-045, p.138, and D.16-01-023, p.41

the solicitation, that project should continue to be considered as such, even if the CalEnviroScreen tool is amended...”<sup>6</sup>

**Question 8:** *Would a solar energy system paired with a storage device meet the definition in Section 2870(a)(4) of “solar energy system”? Why or why not?*

**Response:** PU Code Section 2870(a)(4) defines “solar energy system” as “a solar energy photovoltaic device that meets or exceeds the eligibility criteria established pursuant to Section 25872 of the Public Resources Code.” In the California Energy Commission’s (“CEC’s”) “*Guidelines for California’s Solar Electric Incentive Programs*” developed to implement Section 25872, CEC specifies that “solar energy systems” eligible for financial incentives “must have the primary purpose of collecting and distributing solar energy for electricity generation.”<sup>7</sup> A storage device paired with solar, which charges only from the solar array and discharges solar-generated energy to serve the customer’s needs and preferences, clearly qualifies as meeting this definition.

Including solar-paired storage as eligible for the MAHSRP program has the capacity to create value for both the customer, who could for example use the storage to consume more solar energy on-peak or reduce demand charges, as well as for the utility, who may in the future be able to benefit from storage-provided grid services like frequency regulation. In addition, the Commission and stakeholders could benefit from learning via these projects about how solar-paired storage can best serve solar customers and the grid.

**Question 9:** *If you believe that a solar energy system paired with a storage device meets the Section 2870 definition, should the Commission adopt incentive levels or structures for these projects that differ from the incentive structure that you have recommended in response to Question 7 for systems without storage? If so, how should the incentives differ? Please be specific and provide quantitative examples if relevant.*

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<sup>6</sup> D.16-05-066, p.30.

<sup>7</sup> *Guidelines for California’s Solar Electric Incentive Programs (Senate Bill 1)*, 5<sup>th</sup> Edition, California Energy Commission, p. 6. <http://www.energy.ca.gov/2012publications/CEC-300-2012-008/CEC-300-2012-008-ED5-CMF.pdf>

In designing the incentive structure for solar-paired storage systems in MAHSRP, the Commission should not lose sight of the fact that a key goal of AB 693 is “to install qualifying solar energy systems that have a generating capacity equivalent to at least 300 megawatts... at low-income multifamily housing.” In order to maximize the solar megawatts installed, meet this 300 MW goal and most efficiently serve low-income tenants using the funds allocated to the program, it may be appropriate to determine that funds for incentivizing MAHSRP storage capacity come from another pot of funding, for example the Self-Generation Incentive Program.

***Question 13.d.*** *Which utility tariffs and credits should qualify as meeting the requirements of Section 2870(g)(1)?<sup>12</sup> Please identify any other issues of coordination with current utility tariffs and credits that should be considered in the implementation of the Program.*

**Response:** Section 2870(g)(1) specifically lists “virtual net metering tariffs designed for MASH Program participants” as an eligible tariff. Virtual net metering (VNM) was originally authorized by the Commission in 2008 for multifamily affordable housing properties when the MASH Program was established, and expanded to the general multitenant market in 2011. In D.16-01-044, the Commission determined that the VNM tariff should be continued as a supplement under the NEM successor tariff, with the same requirements regarding nonbypassable charges and interconnection costs as systems under the standard successor tariff.<sup>8</sup> (As noted in footnote 104 of D.16-01-044, the nonbypassable charges that apply to all electricity supplied from the grid under the successor tariff will have a larger impact on VNM customers than on NEM customers, as VNM generation does not reduce grid purchases. The Commission should consider whether a different application of NBCs is more fair and reasonable for MAHSRP participants.)

Specifying VNM for this program will preserve the simplicity that is one of the virtues of net metering, ensuring that both building owners and customers will receive a one-for-one retail credit. There is no reason that these participants, who are all by definition low-income and therefore as a group spend a greater proportion of their income on energy than more advantaged customers, should be compensated at a lower level than what is afforded to more advantaged customers under the net metering successor tariff and related VNM tariff approved in D.16-01-

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<sup>8</sup> D.16-01-044, pp. 98-99.

044. The same decision notes that Pacific Gas & Electric, Southern California Edison and TURN,<sup>9</sup> among many other parties, supported continuing to offer the VNM tariff to solar customers who live in affordable housing.

**Question 14.** *How should the Commission address the requirements of Section 2870(g)(2)?<sup>13</sup>*

- a. *Which existing tariffs could this requirement implicate? Please specifically describe the relationship of Section 2870(g)(2) to each tariff identified.*

**Response:** Section 2870(g)(2) provides, “The Commission shall ensure that electrical corporation tariff structures affecting the low-income tenants participating in the program continue to provide a direct economic benefit from the qualifying solar energy system.” The existing VNM tariff clearly qualifies as “providing a direct economic benefit from the qualifying solar energy system,” since it directly credits participating customers for the renewable energy assigned to them at the full retail rate (while also including nonbypassable charges for each kWh). As noted above, we urge the Commission to approve the current VNM tariff as the sole available tariff under this program.

- b. *How should the Commission account for the impact of potential changes to utility tariffs being considered in other proceedings or contexts (e.g., residential rate redesign) on the obligation set out in Section 28709(g)(2)?*

**Response:** This question points to the need for clarification regarding a key provision of D.16-01-044, involving whether mandatory time-of-use (TOU) rates should apply to DAC customers taking service under the VNM successor tariff via MAHSRP. The section of the decision that obligates customers who go on the NEM successor tariff to take service on a TOU rate does not specify whether all customers on VNM are similarly obligated.<sup>10</sup> Finding of Fact 44 does state, “It is reasonable to continue the VNM tariff, updated to include the requirements of the NEM successor tariff,” but does not specify whether mandatory TOU is included.<sup>11</sup> The IOU advice

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<sup>9</sup> D.16-01-044, pp. 29, 31 and 35.

<sup>10</sup> D.16-01-044, pp. 91-94.

<sup>11</sup> D.16-01-044, p.112.

letters approved by the Commission require that customers on a VNM successor tariff take service on a TOU rate.<sup>12</sup>

However, we recommend that the Commission, in this proceeding, exempt MAHSRP tenants and building owners who take the VNM tariff from being required to go on mandatory TOU at the same time as customers who go on the NEM successor tariff. Page 92 of D.16-01-044 notes that a main goal of mandatory TOU is to “improve [customers’] responsiveness to demands on the grid.” The Commission should gather more data on how mandatory TOU would affect these customers and how able they actually are to shift load before obligating them to move to mandatory TOU as a condition of participating in the MAHSRP program. In the meantime, MAHSRP participants could be subject to *default* TOU on the same schedule as non-solar residential customers.

Reasons why this would make good policy sense include:

- Section 2870(g)(2) requires that the tariff under the MAHSRP program “continue to provide a direct economic benefit from the qualifying solar energy system” to participating tenants, but going on a mandatory TOU rate could result instead in a net bill increase, since utilities are proposing to shift TOU peak periods to late in the day in their rate cases. For example, suppose a customer is considering subscribing to MAHSRP and would be required to move from an inclining block rate to a TOU rate, suppose that the solar project located at her housing facility does not include storage and suppose that TOU peak periods shift to late afternoon/evening time in the near future; as an example, SDG&E has proposed moving from an 11am-6 pm summer peak TOU period to a 4 pm-9 pm daily peak period for residential customers in its general rate case (A.15-04-012).

Since the majority of the customer’s VNM credits from the solar generation would be assigned to hours earlier than 4 pm, the customer could well see a net bill increase as a result of subscribing to MAHSRP, if mandatory TOU were required. Clearly, it is not the goal of this program to saddle participating tenants with a higher energy bill as a result of going solar. By contrast, if the participating customer was allowed to remain on her

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<sup>12</sup> See for example PG&E AL 4802-E, filed February 29, 2016, p. 3D10.

inclining block rate, she would receive a direct economic benefit from subscribing to MAHSRP because she be purchasing fewer kWh on that rate.

- While pairing storage with MAHSRP solar projects could allow solar supply to be better matched with later peak periods, it does not appear realistic that most or all MAHSRP projects can be paired with storage, given the megawatt goals of the MAHSRP program and limited incentive funding. Even if storage is included in a project, the storage may be operated with the goal of reducing demand charges for common load rather than with the goal of serving tenant load during peak hours.
- Low-income housing tenants will generally have limited ability to shift their load in response to time-variant pricing, compared with higher-income customers who will be more likely to have the funds to employ new technologies as well as a higher level of energy awareness. In addition, affordable housing owners may not be well positioned to shift common area load to off-peak times, given their need to keep common areas lit and temperature-controlled for tenants.

### **III. CONCLUSION**

Vote Solar appreciates the opportunity to file these comments pursuant to the *Administrative Law Judge's Ruling Seeking Proposals And Comments On Implementation Of Assembly Bill 693*

Respectfully submitted this Aug 3, 2016 at Oakland, California.

/s/ Susannah Churchill

Susannah Churchill  
Regional Director, West Coast

Vote Solar